

IN THE SPECIFICATION

Please replace the paragraph beginning on page 4, line 6, with the following amended paragraph:

An advantageous implementation of the a method according to the ~~invention is described in claim 2. Use of present system uses a~~ single bit field IA to indicate the use of the indirect addressing mode, which is simple and efficient.

Please replace the paragraph beginning on page 4, line 9, with the following amended paragraph:

An advantageous implementation of the a method according to the ~~invention is described in claim 4. Using present system uses a~~ single common key both to encrypt the message content and to generate or verify the MIC results in an efficient implementation.

Please replace the paragraph beginning on page 4, line 12, with the following amended paragraph:

~~An~~ In an advantageous implementation of the a method according to the ~~invention is described in claim 5. The present system, a~~ receiver device attempts multiple substitutions of the target

address reference by the groups the receiver device is a member of. This way, the receiver device is able to find the group identity for which the MIC matches. This alleviates the need to add the group identity in the communication fragment, therefore optimizing the communication fragment length.

Please replace the paragraph beginning on page 4, line 18, with the following amended paragraph:

An advantageous implementation of the a method according to the ~~invention is described in claim 6. This implementation present~~ system allows the receiver device to restore the communication fragment without local information or without having to perform multiple attempts to find the matching group identity by storing or copying the original first target address reference into the modified protected communication fragment.

Please replace the paragraph beginning on page 6, line 14, with the following amended paragraph:

ID1 sends the message ~~301-311~~ to the router ID2 302 that, on the MAC level, will look like the message 401 in FIG. 4 where, as compared to FIG. 1, fields that are not relevant in the current

explanation are omitted for clarity. The addresses MAC-DEST and MAC-SRC indicate that a message is sent from ID1 to ID2. The addresses NWK-DEST and NWK-SRC indicate that the final destination of the message is all members of G (possibly except ID1 itself) and that the message was sent by ID1. The NWK-INF field further indicates that it concerns a message in the context of indirect addressing (IA=1) and the application on ID1 encrypted the string m using the group key K_g (indicated by $E_{K_g}(m)$) in APL-PAYLOAD. A dark gray background in a message means that its content is protected by a MIC using K_g . As an alternative solution, the application on the sender device ID1 can decide not to encrypt m but only do add a MIC. In this case, $E_{K_g}(m)$ in message 401 will be replaced by m .